REMARKS

Claim Amendments

Claims 1, 4, 7, 11, 14, 17, 21, 24, 27, 31, and 32 have been amended to more particularly point out and distinctly claim the invention. These changes are not necessitated by the prior art, are unrelated to the patentability of the invention over the prior art, and do not introduce any new matter.

CONCLUSION

Wherefore, in view of the foregoing amendments, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no additional fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

Any fee required by this document other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee,

and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

The following is a marked-up version of the changes to the claims which are being made in the attached response to the Office Action dated February 12, 2002.

IN THE CLAIMS:

1.   (Twice Amended) An image searching system comprising:

an image database storing a plurality of database images, each of said plurality of database images having a plurality of features;

a specifying controller for specifying a plurality of key images, each of said plurality of key images <u>being specified by a user and</u> having a respective plurality of features;

an extracting controller for extracting common key image feature values for common key image features that are common to the plurality of key images;

a calculating controller for comparing the common key image feature values, extracted by the extracting controller, with the respective feature values of the plurality of database images to thereby sequentially calculate similarities between each of the common key image feature values and respective ones of the database image feature values for each of the plurality of database images; and

a searching controller for retrieving from the database at least one of the plurality of database images which is similar to the plurality of key images, based on a similarity calculated by the calculating controller.

4.   (Twice Amended) An image searching system which comprises:

an image database storing a plurality of database images to be searched, each of said plurality of database images having a plurality of database image features;

a specifying controller for specifying a plurality of key images used to specify search conditions, each of said plurality of key images <u>being specified by a user and</u>

having a plurality of key image features, each of said plurality of key images having a common feature value for each of said plurality of key image features;

a calculating controller for comparing the plurality of key images, specified by the specifying controller, with the plurality of database images to thereby calculate similarities between the common feature value for each of the plurality of key image features and a corresponding one of the plurality of database image features for each of the plurality of database images;

a selecting controller for retrieving a particular key image from the specified plurality of key images based on the similarities calculated by the calculating controller; and

a searching controller for retrieving images from the plurality of database images based on the similarity between the particular key image, selected by the selecting controller, and the plurality of database images.

7.   (Twice Amended) An image searching system which comprises:

an image database storing a plurality of database images;

a specifying controller for specifying a plurality of key images [used to specify] specified by a user for specifying search conditions;

a first calculating controller for comparing a feature value calculated for each common feature of the plurality of key images to thereby calculate a first degree of similarity for each of said plurality of database images;

a second calculating controller for selecting a particular key image from the plurality of key images and for comparing the particular key image with the plurality of database images to thereby calculate a second degree of similarity for each of the plurality of database images;

a third calculating controller for calculating a final degree of similarity for each of said plurality of database images for use in searching based on the first and second degrees of similarity calculated respectively by the first and second calculating controllers; and

a searching controller for retrieving at least one of the plurality of database images, which is similar to the particular key image, based on the final degree of similarity calculated by the third calculating controller for each of the plurality of database images.

11.   (Twice Amended) An image searching method which comprises the steps of:

storing a plurality of database images in a database;

specifying a plurality of key images [used to specify] specified by a user for specifying search conditions;

extracting common feature values from the plurality of key images;

comparing the common feature values with the feature values of the plurality of database images to thereby sequentially calculate similarities between the common feature values and the database image feature values; and

retrieving from the plurality of database images at least one of the plurality of database images which is similar to the plurality of key images based on the similarities for each of the plurality of database images.

14.   (Twice Amended) An image searching method which comprises the steps of:

storing a plurality of database images in an image database, said plurality of database images each having a plurality of database feature values;

specifying a plurality of key images [used to specify] specified by a user for specifying search conditions, said plurality of key images having common features, said common features of said plurality of key images each having a key image feature value;

comparing the key image feature values of the plurality of key images with the plurality of database feature values of the plurality of database images to thereby calculate similarities between the key image feature values and the plurality of database image feature values;

retrieving a particular key image from the plurality of key images based on the similarities; and

retrieving images from the database images based on the similarity between the particular key image and the plurality of database images.

17.   (Twice Amended) An image searching method which comprises the steps of:

storing a plurality of database images in an image database;

specifying a plurality of key images [used to specify] <u>specified by a user for specifying</u> search conditions, said plurality of key images each having a plurality of common feature values, each of said common feature values corresponding to one of the features of the plurality of key images;

comparing the common feature values of the plurality of key images with respective feature values of the plurality of database images to thereby calculate first similarities therebetween;

selecting a particular key image from the plurality of key images and comparing the particular key image with the plurality of database images to thereby calculate second similarities therebetween;

calculating a final similarity for use in searching based on the first and second similarities; and

retrieving one of the plurality of database images, which is similar to the particular key image, based on the final similarity.

21.   (Twice Amended) A software program including computer-executable instructions stored on a recording medium, said program comprising:

instructions for storing a plurality of database images in a database;

instructions for specifying a plurality of key images [used to specify] <u>specified by a user for specifying</u> search conditions;

instructions for extracting common feature values of features of the plurality of key images;

instructions for comparing the common feature values with feature values of the plurality of database images to thereby sequentially calculate similarities between the common feature values of the plurality of key images and the database image feature values; and

instructions for retrieving from the plurality of database images at least one of the database images which is similar to one of the key images based on the similarities.

24. (Twice Amended) A software program including computer-executable instructions stored on a recording medium, said program comprising:

instructions for storing a plurality of database images in an image database, wherein said instructions for storing also include instructions for storing a plurality of database image feature values for each of the plurality of database images;

instructions for specifying a plurality of key images specified by a user having common feature values used to specify search conditions;

instructions for comparing the plurality of key images with the plurality of database images to thereby calculate similarities between common feature values of the plurality of key images and the database image feature values;

instructions for retrieving a particular key image from the specified plurality of key images based on the similarities; and

instructions for retrieving images from the plurality of database images based on the similarity between the particular key image and the database images.

27. (Twice Amended) A software program including computer-executable instructions stored on a recording medium, said program comprising:

instructions for storing a plurality of database images in an image database, said database images each having a plurality of database image feature values;

instructions for specifying a plurality of key images [used to specify] specified by a user for specifying search conditions, said plurality of key images each having a plurality of features;

instructions for calculating feature values for each of the plurality of key images from the plurality of features for each of the plurality of key images;

instructions for comparing the feature values of each of the plurality of key images with respective feature values of the plurality of database images to thereby calculate first similarities between the feature values of the plurality of key images and the feature values of the plurality of database images;

instructions for selecting a particular key image from the plurality of key images;

instructions for comparing the feature values of the particular key image with the feature values of the plurality of database images to thereby calculate second similarities therebetween;

instructions for calculating a final similarity based on the first and second similarities; and

instructions for retrieving at least one of the plurality of database images, based on the final similarity.

31. (Once Amended) An image searching method in an image database system storing a plurality of database images which comprises the steps of:

specifying a plurality of key images [used to specify] specified by a user for specifying search conditions, said plurality of key images each having a plurality of key image features each corresponding to at least one of a plurality of database features, said plurality of key images having a plurality of common features which are common to all of the plurality of key images;

calculating common key image feature values from the common features for each of the plurality of key images;

comparing the common feature values of the common features with corresponding database image features of the plurality of database images to calculate similarities therebetween;

retrieving a particular key image from the plurality of key images based on the similarities such that the particular key image retrieved is the key image which most resembles the database images being searched for; and

retrieving images from the plurality of database images which are most similar to the particular key image based on the similarity between the particular key image and the plurality of database images.

32. (Once Amended) A recording medium storing therein a computer-executable image searching program for searching an image database storing a plurality of database images, said program comprising:

specifying a plurality of key images [used to specify] <u>specified by a user for specifying</u> search conditions;

calculating common feature values of the plurality of key images by comparing the plurality of key image features for each of the key images to determine feature values which are common to all of the plurality of key images;

comparing common feature values of the plurality of key images with the database image feature values of the plurality of database images to calculate similarities therebetween;

retrieving a particular key image from the specified plurality of key images based on the similarities; and

retrieving images from the plurality of database images based on the similarity between the particular key image and the plurality of database images,

wherein the particular key image is the one of the plurality of key images which most resembles a desired image.